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**Carbon Forestry and Climate Compatible  
Development in Mozambique:  
A Political Economy Analysis**

Julian Quan, Lars Otto Naess, Andrew Newsham, Almeida Siteo  
and Maria Corral Fernandez

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# **Carbon Forestry and Climate Compatible Development in Mozambique: A Political Economy Analysis**

Julian Quan, Lars Otto Naess, Andrew Newsham, Almeida Siteo,  
and Maria Corral Fernandez

## **Summary**

This paper looks at the political economy of carbon forestry and REDD+ in Mozambique in view of goals for climate compatible development, i.e. simultaneously addressing emission reduction, adaptation and development. Mozambique is one of the world's poorest countries and one of the most at risk from the effects of climate change. At the same time, the country has considerable forest resources and is well placed to take advantage of future public or private funding for carbon forestry and REDD+. The paper asks how debates and decisions on REDD+ in Mozambique may shape outcomes for different groups. Using a political economy framework, the paper considers actor perspectives, interests and interrelations in the broader institutional and political context in order to analyse and the prospects for carbon forestry and REDD+ to contribute climate compatible development in Mozambique.

REDD+ debates in Mozambique are coloured by international as well as domestic debates over land and forest governance, and remain somewhat divisive. Perhaps surprisingly, REDD+ is relatively marginal in the broader climate change and development debates in the country. It is as yet unclear what REDD+ will look like in practice, and most of actors' perspectives – whether in favour or opposed to REDD+ and carbon forestry – are based on expectations of what might be, and on perceptions of the purpose of carbon forestry, rather than actual experience. The government has recently passed a decree setting out governance processes for REDD+ in Mozambique, which may open up scope for piloting and a learning process.

The possible outcomes of REDD+ projects and initiatives for climate compatible development can be considered as consequences of two key factors: first, the level of community control over land and resources, and second, the mix of natural and plantation forests and other land use activities. Across these two dimensions there is a range of possible models for REDD+/carbon forestry, all of which may be deemed 'climate compatible' in the sense that they could be designed to provide mitigation benefits as well as income, livelihoods and adaptation benefits. In practice, however, the outcomes for different groups and for Mozambique's adaptive capacity and overall contributions to emissions reduction and climate stabilisation are likely to vary significantly, depending on the models adopted and the broader opportunities and constraints presented by Mozambique's overall development context. In particular, local communities are at risk of losing out from large scale carbon plantations or exclusion from natural forests, whereas private sector REDD+ operators and conservation agencies may be able to capture the benefits. On the other hand, while exclusionary approaches could undermine sustainability, in more inclusive approaches, the level of benefits available to rural community members may be very limited if alternative income generating projects and systems for sustainable forest utilization are not established alongside carbon payments, which in themselves are unlikely to support adequate levels of payments to participating farmers.

We conclude that a political economy analysis of REDD+ and carbon forestry options are an important complement to discussions around technical feasibility and economic affordability, and can in turn help expand the understanding of policy constraints and opportunities for REDD+/carbon forestry to support climate compatible development goals.

**Keywords:** climate change; REDD+; carbon forestry; Mozambique; political economy.

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# Acronyms and abbreviations

AFD	Agence Francaise de Developpement (French Development Agency)
CCD	Climate compatible development
CDM	Clean Development Mechanism
CIFOR	Centre for International Forest Research
COP	Conference of the Parties
CTV	Centro Terra Viva (Mozambican NGO)
DNPDR	National Directorate for Rural Development Planning
DNTF	National Directorate for Lands and Forests, Mozambique,
DUAT	Land Use and Exploitation Right (in Mozambique)
EN-REDD	National REDD Strategy, Mozambique
EC	European Commission
EU	European Union
FAEF	Faculty of Agronomy and Forest Engineering, (UEM, Mozambique)
FAS	Sustainable Amazonia Foundation, Brazil
FCPF	Forest Carbon Partnership Fund
FFI	Flora and Fauna International
FoEI	Friends of the Earth International
IFC	International Finance Corporation
IIED	International Institute for Environment and Development
INGC	Institute for Disaster Management, Mozambique
iTC	Community Lands Initiative
IUCN	International Union for Conservation of Nature
JA!	<i>Justiça Ambiental</i> (“Environmental Justice!” – Mozambican NGO)
JICA	Japanese International Cooperation Agency
LULUCF	Land Use, Land Use Change and Forestry
MAE	Ministry of State Administration
MICOA	Ministry of Environment, Mozambique
MINAG	Ministry of Agriculture, Mozambique
MITUR	Ministry of Tourism
MRV	Monitoring, Reporting and Verification
NGO	Non-Governmental Organisation
NORAD	Norwegian Agency for Development
NTFP	Non-Timber Forest Products
ORAM	Rural Organization for Mutual Aid, Mozambique
PES	Payment for Environmental Services
REDD+	Reducing emissions from deforestation and forest degradation, and to foster conservation, sustainable management of forests, and enhancement of forest carbon stocks
R-PIN	REDD Readiness Plan Idea Note
R-RP	REDD Readiness Proposal
UEM	Eduardo Mondlane University, Mozambique
UNAC	National Union of Peasant Farmers, Mozambique
UN-REDD	United Nations REDD programme
VCM	Voluntary Carbon Market
WWF	World Wide Fund for Nature

# 1 Introduction

There is growing international focus on the integration of approaches to climate change in ways that capture so-called ‘triple wins’ combining adaptation, mitigation and development goals. One of the terms that embody these goals is “Climate Compatible Development”, defined as “development that minimises the harm caused by climate impacts, while maximising the many human development opportunities presented by a low emissions, more resilient, future” (Mitchell and Maxwell, 2010:1).

Carbon forestry, in particular REDD (Reducing emissions from deforestation and forest degradation)<sup>1</sup>, is increasingly seen as a potential mechanism for achieving multiple goals. This paper considers the case of carbon forestry in Mozambique. Its focus is on how debates about REDD+ and carbon forestry<sup>2</sup> come together around key narratives, and what implications there are for the various actors involved in the process. Mozambique is an interesting case for several reasons. It is one of the world’s poorest countries, with a high social vulnerability to climate change. At the same time, it is a forest rich country, with considerable potential opportunities to take advantage of public or private funding for carbon forestry and REDD+. As part of a REDD-readiness process, the government has recently passed a decree setting out governance processes for REDD+ activities in the country, as a response to increasing pressure on government to release large areas of land to the private sector to facilitate REDD+ implementation.

At the same time, there are several challenges to a successful implementation of REDD+ in view of goals for climate compatible development. We use a political economy framework to enable tracing of narratives, actors, and politics around three key components: first, the global and national development *context* for REDD+; second, the *competition and conflicts* amongst competing narratives and actors shaping carbon forestry and REDD+ implementation and bidding for the necessary resources, including land, finance and policy space; third, the potential *consequences* of these processes for different social groups and for climate compatible development goals.

Following discussion of the key concepts and the analytical framework in Section 2, Sections 3, 4 and 5 lay out the following key findings. We show how discussions of REDD+ in Mozambique are products of both international and domestic debates, in which perceptions are coloured by unresolved tensions concerning land and forest governance in the country. The institutional framework for REDD+ and the practical nature, scale and responsibilities for leadership of initiatives remain contested and controversial in Mozambique, with a range of actors involved and multiple interests at stake. Most of the actors’ perspectives – whether in favour or opposed to REDD+ and carbon forestry – are based on their perceptions and understandings of how it can be expected to operate, rather than actual experience.

The possible outcomes of REDD+ debates for climate compatible development can be considered to result from two key factors: first, the level of community and local users’ control over land and resources, and second, the mix of natural and plantation forests. These two dimensions open up a range of possible models for REDD+/carbon forestry, all of which may be deemed ‘climate compatible’ in the sense that schemes could be designed to provide income, livelihoods and adaptation benefits in addition to mitigation benefits derived from carbon savings. In practice, however, outcomes for different groups may vary significantly, depending on how interventions are designed. In particular, local communities are at risk of

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<sup>1</sup> The expanded “REDD+” also includes efforts to foster conservation, sustainable management of forests, and enhancement of forest carbon stocks.

<sup>2</sup> The focus of the paper is REDD+ as an example of a mechanism to represent a broader group of ‘carbon forestry’, the latter understood as forest management where carbon sequestration is the primary goal.

losing out from large scale carbon plantations or exclusion from natural forests, whereas private sector REDD+ operators and conservation agencies could capture the benefits. Although exclusionary approaches could undermine sustainability, in more inclusive approaches, the level and sustainability of benefits for rural communities from reduced deforestation may be very limited if alternative income generating projects and sustainable forest utilization are not established alongside carbon payments.

We conclude that stronger and better governance of land and natural resource use in rural Mozambique is essential to establish development trajectories compatible with tackling climate risks. For REDD+ to contribute to this, its interventions need to be located within a coherent institutional and policy framework that combines land governance, forest management, and rural economic development that addresses multi-level governance dimensions involving different sectors of government and multiple players in a territorial context. Specifically, more systematic efforts to secure community land rights are needed to ensure social inclusion in REDD+. Additionally, appropriate forms of capital investment and operating alliances involving the private sector, rural communities, development agencies, local government should be encouraged as a foundation for CCD in the longer term.

The paper is based on document analysis of peer reviewed and 'grey' literature, the results of a series of 24 semi-structured interviews with representatives of government, donors and international agencies, civil society and the private sector engaged in developments and debates concerning carbon forestry, REDD+ and climate change in Mozambique; findings of a focus group discussion with 11 key informants from provincial level in Chimoio, Mozambique, 9<sup>th</sup> December, 2013, and a workshop in Maputo 24<sup>th</sup> February 2014 with approximately 30 participants. Informants are not been identified personally, because of the potential sensitivity of statements and commentaries made.

The study forms part of a project funded by the Climate and Development Knowledge Network (CDKN)<sup>3</sup>, which also includes case studies of the political economy of climate compatible development in relation to artisanal fisheries in Ghana (Tanner *et al.* 2014), and low carbon energy in Kenya (Newell *et al.* 2014).

## 2 Concepts and framework for analysis

### 2.1 Climate compatible development and the rationale for political economy analysis

Climate compatible development (CCD) is a normative goal for mitigation, adaptation and development, recognising their overlaps and synergies. It was launched and then promoted by the UK and Dutch government financed Climate and Development Knowledge Network (CDKN). At the core of CCD is the idea that responses to climate change must be addressed in an integrated manner to minimise trade-offs between these different goals, and, significantly, that there are potential synergies to be achieved by doing so. In that sense, it is similar to the concept of 'triple wins' as referred to in relation to agriculture and climate change, for example, which emphasises the synergies between adaptation, mitigation and food security (FAO, 2010).<sup>4</sup> An example of a synergy is livelihood diversification through sale of sustainably harvested forest products that supports adaptation and leads to increases in household incomes. Trade-offs between the three goals may be, for example, establishment of forest plantations for the purposes of mitigation of carbon emissions that may block or limit access to communities, thereby undermining their livelihoods options and ability to cope with

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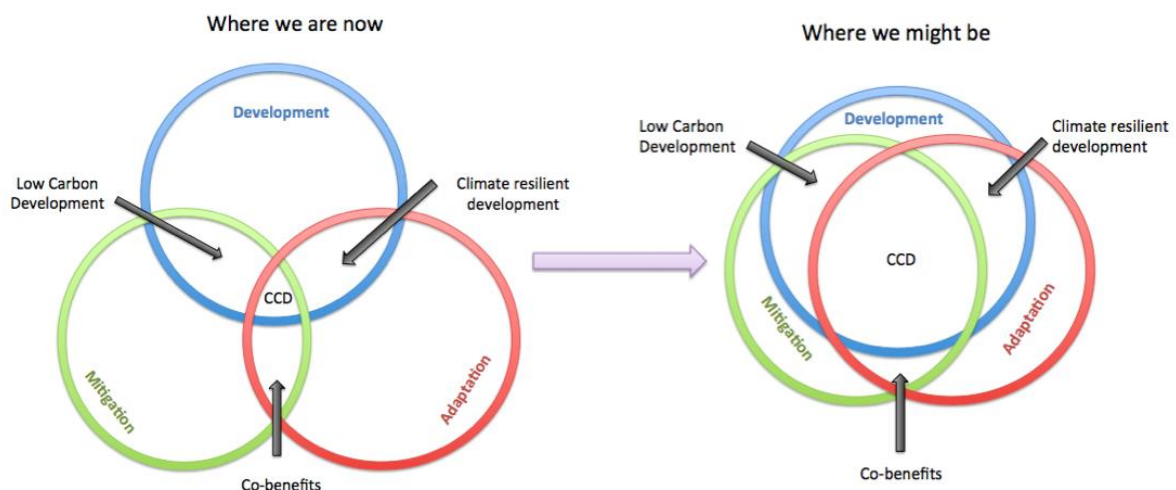
<sup>3</sup> [www.cdkn.org](http://www.cdkn.org)

<sup>4</sup> See also <http://ccafs.cgiar.org/blog/climate-smart-agriculture-offers-triple-win#.UzWJYPnlaSo>



climate risks. Figure 1 shows a graphical representation of climate compatible development and the idea that the space for climate compatible development is dynamic and may expand (or contract) over time.

**Figure 1. Climate compatible development**



Source: authors' own (adapted from Mitchell and Maxwell 2010).

The rationale for applying a political economy analysis to CCD is that interventions and policy developments seeking to promote climate compatible development do not take place in a vacuum. Rather, they are subject to contestations and power struggles amongst multiple interest groups seeking greater control and influence over access to natural and financial resources and other assets and to influence policy and institutional processes in order to realise their objectives. In this case, as significant REDD+ interventions have not yet taken place on the ground in Mozambique, we apply a political economy analysis to REDD+ primarily as a policy process to assess the implications for CCD in the light of progress so far in developing a policy and institutional framework for REDD+ and its potential practical outcomes.

## 2.2 Carbon forestry, REDD+ and their potential co-benefits

REDD (Reducing emissions from deforestation and forest degradation) was launched in 2005 and came to prominence after the 2007 Bali Conference of the Parties (COP). Ideas of carbon sequestration and reduced deforestation as a mitigation option were nothing new, but interest and investment had been on the decline since the late 1990s, and carbon sequestration through afforestation or reforestation failed to attract any significant funding through CDM (Clean Development Mechanism) under the Kyoto Protocol. The idea behind REDD was that its introduction of a results-based approach and economic incentives would make it more effective than past forest conservation efforts (Seymour and Angelsen, 2009). REDD emerged amidst an increasing focus on carbon offsets through trading in the voluntary carbon market (VCM).

The addition of “+” in 2007 expanded REDD to also include sustainable management of forests, conservation of forest carbon stocks as well as enhancement of forest carbon stocks. Thus initially primarily concerned with reducing deforestation, REDD+ has seen an expanding agenda, with increasing focus on co-benefits or “non-carbon benefits”. These

include adaptation, biodiversity conservation, protection of ecosystem services, community benefits, and economic benefits (Li, 2011).

While there has been some concern that “overloading” the REDD+ agenda could dilute it and make it harder to achieve its original objectives (Angelsen and McNeill, 2012), others argue that co-benefits should be seen as pre-requisites for achieving REDD+ goals (Visseren-Hamakers *et al.*, 2012). The argument is that REDD+ could capitalise on synergies between its role in climate change mitigation and other goals: Carbon forestry can generate public and private revenues through sequestering carbon, while potentially making forests and their associated livelihoods and land use systems more resilient to the effects of climate change.

For example, REDD+ activities could prove beneficial for adaptation to climate change by protecting ecosystem services such as access to water, food and income sources. Forests are important as sources of a wide range of Non-Timber Forest Products (NTFPs) while also providing resources for communities living in or nearby forests to cope with and adapt to climate risks and stressors (Locatelli and Pramova 2010). As the home of wild relatives of many crops, forests also constitute a reservoir of genetic variation crucial for successful adaptation to climate change (Wollenberg *et al.* 2011). It has also been argued carbon forestry or agroforestry initiatives that are able to guarantee access to local population’s property rights or enhance tenure security can contribute to poverty reduction (Barbier and Tesfaw 2012).

However, the possibility of achieving such co-benefits through REDD+ in practice has been challenged, and a number of concerns remain. First, a key concern on the potential of REDD+ for mitigation continues to be the difficulties to properly set up and integrate Monitoring, Reporting and Verification (MRV) systems and techniques for measuring carbon emissions reductions or removals. Related to this are the establishment of Reference Levels (RLs) for emission reductions or increased removals, and the issues of leakage (i.e. that reductions in emissions in one area leads to increases in emissions elsewhere) and non-permanence (i.e. reversal of emissions reductions or sequestration achieved).

A second major area of concern relates to the questions of who owns, or has what rights of access and use of the carbon, the trees, the land and the forest, and the revenue generation and benefit sharing mechanisms. Also, who has control or influence over these mechanisms? The shape of REDD+ programmes is ultimately decided by national governments. To understand the potential of REDD+ as part of a sustainable, climate-compatible development model in Mozambique, it is therefore imperative to understand REDD+ in the country-specific environmental, socio-political and economic context.

## **2.3 Approach and analytical framework**

The political economy approach adopted here addresses the ongoing process of policy development, strategy and programme development and associated institutional questions surrounding REDD+ and carbon forestry in Mozambique. It focuses on: a) the global and national development context for REDD+ in Mozambique; b) interaction, competition, and conflicts amongst different actors and the different narratives actors use in relation to forest resources, carbon forestry and the REDD+ planning and implementation process, and access to the necessary resources, including land and finance and to the REDD+ process itself; and c) the potential consequences of these processes for different social groups and for climate compatible development goals.

As debate on carbon forestry in Mozambique remains primarily at the level of policy and strategy development, we focus on these processes, using an understanding of policy development and implementation processes as incremental, complex and “messy” (Keeley

and Scoones 2003), constrained by pre-existing socio-political structures and institutional contexts, including the lobbying power of the private sector, organized civil society and the machinery of government itself, which involves actors with often competing goals and interests - a perspective applied by Bonnal and Kato (2011), focussing on rural policy in Brazil. In seeking to influence policy processes, these actors may invoke evidence provided by research in less than straightforward or transparent ways (Keeley and Scoones 1999; Scoones and Thompson 2009, Tanner and Allouche, 2011). This is in contrast to a traditional rational-positivist-linear view, in which technical knowledge is available and communicated to policy-makers, who then make policy changes grounded in a thorough understanding of 'the problem'.

Our approach combines three perspectives on the policy process, in order to better understand its non-linear, deeply political character. One emphasises the interactions of state and civil society, and different interest groups; another examines the histories and practices linked to shifting discourses, and how these can influence policy and practical action; the third considers the roles and agency, or capacity to make a difference, in influencing public policy and its outcomes (Keeley and Scoones 2003; Wolmer *et al.* 2006).

A political economy approach is not concerned solely with understanding policy, but in utilising an understanding of how the dynamics of actor competition, power relations and institutional context shapes policy, and constrains its implementation so as to influence policy choice and design. Actors can gain influence over policy through access to 'policy spaces', defined by Gaventa (2006:6) as "opportunities, moments and channels where citizens can act to potentially affect policies, discourses and decisions and relationships that affect their lives and interests". As such, policy spaces may be considered as areas where advocates of climate-compatible development should focus their efforts to exert influence over policy processes. Political economy analysis can be applied in debate and deliberation towards achievement of more climate compatible development, by: a) identifying the relevant policy spaces and opportunities; b) understanding how actors utilise multiple assets and resources under their control in order to gain advantage over others and realise their interests and objectives; and c) identifying how the governance of policy processes can be strengthened by introducing institutional rules and processes that are fair, open and enable the representation and participation of weaker groups.

In applying this broad political economy framework to REDD+ in Mozambique, the discussion is organised as follows:

- Section 3 looks at the *context*; the key policy problems and processes, and the details of the context most pertinent to understanding the research problem.
- Section 4 focuses on the *competition and conflicts* that exist around the institutional framework for REDD+ and the use of forest land resources and of forest carbon, including the power relations, alliances and contests that exist amongst actors concerned with REDD+.
- Section 5 considers potential *consequences* of REDD+, in terms of outcomes for different groups and the likely winners and losers that result from competitions and conflicts amongst actors in carbon forestry and the way in which interventions are designed.

Ultimately, the aim is to get to the point where it is possible to produce alternative visions of whether and how REDD+ can contribute to climate compatible development. This means gauging the feasibility of achieving the different options, what would need to happen, and which policy spaces, actors and 'coalitions for change', would be involved in bringing about acceptable and sustainable trade-offs amongst objectives of growth, climate mitigation and adaptation and the interests of different stakeholders.

### 3 Context: Forest governance and REDD+ in Mozambique

Mozambique has recently published a national REDD+ decree<sup>5</sup>, which is intended to open up space for pilot projects. This section outlines the key issues at stake in debates around carbon forestry and REDD+. After reviewing the context on forests and land access, it examines the development of the REDD+ and emergence of REDD+ proposals, and the government REDD+ decree, followed by an overview of a pilot community-based carbon forestry initiative in Sofala Province, which arguably is the only carbon forestry project so far in Mozambique that has tried to achieve 'triple wins' in the form of development benefits for local communities, adaptive capacity and mitigation.

#### 3.1 Forests and access to land in Mozambique

Mozambique has a high level of forest cover, covering more than 50% of the country's land area (Parker *et al.* 2009). Mozambique's forest resources principally comprise *miombo* woodlands of varying density and composition throughout the centre and north of the country, together with coastal forest formations and dryland forests and woodlands in the south. Deforestation rates were estimated at 0.58% or 219,000 hectares per year from 1990 – 2005 (Marzoli 2007).

While the main direct causes of forest degradation in Mozambique are illegal logging and fire (Mackenzie 2006, Nhantumbo and Izidine 2009), there are many drivers and indirect causes of deforestation and forest degradation to examine. These are commonly regarded as a combination of increasing pressure on forest resources by the growing population dependent on small scale farming and natural resource use alongside continuing timber extraction, urban expansion and a wide range of economic activities, including illegal logging, fuelwood consumption and charcoal production for urban markets, and the increasing development of sites for permanent agriculture and large scale mining (Marzoli, 2007; Cuambe 2010, CIFOR 2012, MICOA 2013).

These activities are driven by population growth, poverty and an absence of sustainable alternative livelihoods, in an institutional context characterised by lack of harmonisation amongst sector policies, weak implementation of policies and legislation, lack of capacity for land use planning and a lack of incentives to maintain forest cover. Forest resources in Mozambique are also threatened by over-reliance on fuelwood and charcoal for energy in both urban and rural areas, and on traditional low-intensity shifting cultivation for food and crop production. Fuel wood and charcoal consumption are estimated at 9.3 and 5.5 million tonnes respectively (Sitoe *et al.* 2007) equivalent to a per capita consumption of 1-1.2 m<sup>3</sup> per year (CIFOR 2012).

Since 2007, proposals to dedicate large areas to forestry and forest conservation land uses supported by REDD+ finance for purposes of carbon storage have emerged, against a background of rapid growth in large scale land investments in Mozambique, leading to growing incidence of tenure insecurity and land conflict (FIAN 2012, Norfolk and Hanlon 2012, Cotula 2011, Oakland Institute 2011, Nhantumbo and Salomão 2010). Conflicts associated with large scale forest investments in central and northern Mozambique have attracted considerable publicity and interest amongst researchers and development agencies.

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<sup>5</sup> Law 70/2013; *Boletim da Republica*, Government of Mozambique, 20 December 2013

Although Mozambique's land law recognises the land rights of rural communities established through customary and beneficial occupation, and enables them to register these rights through a relatively simple process of land delimitation (Borras *et al.* 2012, Norfolk and Tanner 2006, Tanner and Baleira 2006, Toulmin and Quan 2000), community land registration has not been systematically implemented by the government. In contrast, private investors have found it relatively easy to gain leasehold titles for land development and natural resource exploitation, for which the law provides only weak safeguards and procedures for consultation for affected communities (Hoekma 2012).

Demographic pressure and other demands on land resources lead to competition for land access amongst expanding rural communities and, increasingly, conflicts between communities and private investors, both large and small, who seek access to productive land well served by developing infrastructure and available supplies of labour, especially in and around Mozambique's development corridors (German *et al.* 2014, Quan *et al.* 2013,). In the present policy and investment climate, greater tenure security for rural people, and reductions in the level of uncertainty brought about by weak land governance could provide real incentives and opportunities for productive interaction of small and large scale and commercial farming enterprise, and for intensified and conservation-oriented sustainable farming techniques and partnership-based natural resource management approaches that can help to maintain or even enhance forest cover. Systematic government programming to address these opportunities has been absent, however. Despite decentralisation, centralised but poorly coordinated sector-based development policies predominate, tending to prioritise commercial investor-led economic growth.

Communities affected by land investments and aspiring to some form of development partnership with private developers have been almost entirely reliant on support to secure land rights from NGOs such as ORAM, and subsequently from the independent donor-funded programmes of the Mozambique Community Lands Initiative (iTC) to help secure land access and improve productive livelihood opportunities, with *ad hoc* assistance from provincial or specialist government institutions (e.g. those responsible for small scale fisheries, the cashew nut sector, export promotion, tourism, disaster management and irrigation) concerned to foster community development. Since 2006, iTC has provided rural communities with support in securing land rights, legal empowerment, and conflict resolution by acting as an intermediary between rural communities and potential government and private sector partners. The current iTC programme however does not extend to systematic facilitation of partnerships with land investors, or finance for implementation of community-based land use plans and projects. This would require stronger, broader and more institutionalised collaboration between iTC and other rural investment programmes and various sectors of government (Quan *et al.* 2013).

In practice, investments in large scale, multipurpose plantations have tended to reduce community access to agricultural land, while producing relatively little employment or economic benefits for communities, and providing limited support to community infrastructure or alternative income generation through Corporate Social Responsibility budgets. Plantation companies seek to maximise returns by establishing plantations in large contiguous blocks for industrial-scale production of "flexi" tree crops, geared towards paper, pulp, timber, energy or carbon storage markets, and have little or no incentive to develop out-grower schemes involving farmer-managed woodlots on community land (German *et al.* 2014 forthcoming). Similarly, organised protection of remaining large tracts of forest land, favoured by conservation agencies has, significant potential to reduce carbon emissions, but risks exclusion of expanding local populations from potential agricultural land.

The 2002 Forest and Wildlife legislation also provides for 20% of timber and wildlife exploitation royalties and government revenues from commercial forest exploitation and natural resource / wildlife utilisation to be channelled to rural communities. Implementation of

these policies has, however, been slow, and community institutions for resource and revenue management are so far only weakly developed, leading to risks of poor utilisation and misappropriation of funds.

### **3.2 The emergence of carbon forestry and REDD+ in Mozambique: processes and actors**

This sub-section summarises the main preparatory processes involved in development of REDD+, and the principle actors involved, including the proponents of a series of large-scale REDD+ project proposals, and shows how the process is only weakly linked to strategies to address Mozambique, with relatively few donors directly engaged.

The Mozambique Government has prioritised and sought technical assistance from donors to develop a National REDD Strategy (EN-REDD), and a “REDD Readiness Proposal” (R-RP), a document required to enable Mozambique to draw on international REDD+ funds. The process started in 2008 with the preparation and submission of a Readiness Plan Idea Note (R-PIN) to the World Bank Forest Carbon Partnership Facility (FCPF). In 2009 a National REDD+ Working Group was established that includes the two lead government agencies - Ministry for Environmental Coordination (MICOA - *Ministério para a Coordenação da Acção Ambiental*), the Agriculture Ministry's National Directorate for Lands and Forests (DNTF - *Direção Nacional de Terras e Florestas*) which is part of the Ministry of Agriculture (MINAG). The Working Group also involved the national environmental advocacy NGO *Centro Terra Viva* (CTV), Eduardo Mondlane University (UEM), the International Institute for Environment and Development (IIED), the Brazilian organisation *Fundação Amazonas Sustentável* (FAS), and the Finnish-based company Indufor. UEM provides mainly biophysical-related technical assistance through its *Faculdade de Agronomia e Engenharia Florestal* (FAEF, Faculty of Agronomy and Forest Engineering), while CTV has facilitated stakeholder consultations.

The key bilateral donors supporting REDD+ in Mozambique are JICA and NORAD. A Norwegian-funded South-South cooperation programme to support REDD+ strategy development and the (R-PP) process ran from 2009 until 2012. The process was assisted by FAS, which shared lessons and knowledge on REDD+ implementation from Amazonia, and by other members of the national REDD+ working group. It was backstopped by the World Bank, as manager of the global Forest Carbon Partnership Fund (FCPF). In parallel, Japan has provided financial and technical assistance for REDD+ to the Department of Natural Resource Inventory at DNTF since August 2010. A Japanese-funded readiness initiative on monitoring, reporting and verification (MRV) and reference levels (RLs) will run until 2014 (Wertz-Kanounnikoff *et al.* 2011).

The development of the national REDD+ strategy was postponed on the World Bank's recommendation in order to allow for completion of the R-PP and to allow more international and national processes to develop, before the country established a definitive strategy for REDD+. The R-PP was submitted to the FCPF in January 2012, followed by a revised version in February 2013 which calls for an inter-sectoral and landscape/corridor-focused approach, identifying sub-national units as pilots. The FCPF reviewed the document and in June 2013 the World Bank agreed to extend the initial grant of US\$ 200,000 in the amount of US\$ 3.6 million. The draft National REDD+ Strategy embraced this approach and identified pilot areas for REDD+ implementation in the Manica – Sofala - Zambézia, Nampula - Niassa and Gaza - Maputo regions, in central, northern and southern Mozambique respectively. The final R-PP, however, focuses on only two national pilot projects, one for conservation agriculture and another one for fire prevention.

While global approaches to REDD+ have shifted to include greater emphasis on forest conservation and climate adaptation objectives alongside carbon sequestration, during 2011 and 2012 Mozambique received a growing number of proposals from the private sector and

from conservation agencies for large scale carbon forestry and forest conservation REDD+ projects. This situation is highlighted in the R-PP document, which points out that the total land areas sought by different project proponents, (although these appear to overlap) amounted to over 30 percent of Mozambique's total land area (MICOA 2013, Hanlon 2012). These project proposals included:

- Proposals by the company Mozambique Carbon Initiatives (MCI, also known as MozCarbon)<sup>6</sup> for 18 projects to develop carbon credits for trade in all the provinces identified for piloting REDD+, spanning 15 million ha, approximately 19% of Mozambique's land area. The company undertook carbon assessments and intends to start projects in Sofala (Gorongosa, Nhamadzi, Vanduzi) in an area covering 273,600 ha (Hanlon 2012).
- In cooperation with an international NGO, identified by Hanlon (2012) as Flora and Fauna International (FFI), a company intends to implement REDD+ in the Niassa Reserve.
- HEWA – Moçambique Limitada applied for an area of 3.4 million ha in Cabo Delgado that includes the districts of Macomia, Montepuez, Muidumbe, Mocimboa da Praia, Palma, Nangade, Mueda and Quissanga (Hanlon 2012).<sup>7</sup>
- The World Wide Fund for Nature (WWF)'s intention to implement REDD+ across an area of 250,000 hectares in the Zambezi Delta and Cabo Delgado.
- The private company Envirotrade would expand its carbon forestry initiative. in the Gorongosa buffer zone (discussed in section 3.4 below) and also implement a REDD+ pilot in the Quirimbas National Park in Cabo Delgado<sup>8</sup>
- *Agence Française de Développement* (AFD, French Development Agency) is investigating the potential for REDD+ in the Gilé Reserve in Zambézia.
- As an alternative to charcoal production in Mabalane, Gaza Province, the DNTF of the MINAG supported by World Food Programme (WFP), Japanese International Cooperation Agency (JICA) and the Japanese private company Carbon Free Consulting Corporation, is conducting an agroforestry pilot project as a 'carbon offset project to be scaled up to REDD+' (MICOA 2013).

These projects all appear to have been conceived on a VCM Carbon Trading model, whereby carbon stocks could be maintained or enhanced at scale by proponents seeking to control forest cover and tree planting over large land areas, and carbon credits sold commercially through the voluntary carbon market or a market-based REDD+ mechanism. This, however, would require very considerable investments in MRV systems and control of deforestation and forest degradation to demonstrate the increased carbon accumulation envisaged at such a large scale. Despite interest of some international conservation agencies in some of these projects, when consulted, both IUCN and WWF stated that their primary focus was forest and ecosystem conservation and that they remained sceptical about the potential of REDD+ as a mechanism to achieve this.

As a result, government requested assistance from the World Bank to develop legislation to help manage the situation. With the R-PP approved, and REDD+ legislation (discussed in Section 3.3 below) now in place, strategy development for REDD+ was intended to resume in 2014, to incorporate lessons of continuing national and international experience.

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<sup>6</sup> 70% of MCI is owned by a fund within the UEM. The other 30% is owned by Dutch-based Pan-African Carbon Initiatives (PACI).

<sup>7</sup> HEWA is 20% owned by FRELIMO Political Commission member Alberto Chipande and 80% owned by the US company HEWA LLC. They are asking for half of Cabo Delgado, 3.7 million ha, between the Niassa game reserve and the Quirimbas National Park (Hanlon 2012).

<sup>8</sup> This initiative has now closed because of unfavourable carbon markets.

Since completion of the RPP, Norway has gone on to fund an initiative known as Testing REDD or TREDD, which grew out of the national REDD+ Working Group, and involves many of same partner organisations, including IIED, UEM/FAEF and CTV, together with implementing partners ORAM (Rural Organisation for Mutual Aid), a national community land and natural resource rights NGO, and Micaia, a Manica-based social enterprise foundation working with rural communities to establish inclusive business models.<sup>9</sup> The program focusses on developing feasible delivery models in central Mozambique (Manica, Sofala and Zambézia) during the 2012 to 2015 period, where it seeks to engage directly with governmental actors. It also involves the University of Edinburgh in addressing carbon measurement and verification questions. There is an acknowledgement of the potential role of Mozambique's *Iniciativa de Terras Comunitárias* (ITC, Community Lands initiative) in securing community land rights in areas identified for REDD+ projects and of CTV in legal awareness raising and empowerment in the field (Nhantumbo 2013, Nhantumbo *et al.* 2013).

Although the implementation of REDD+ as a means for Mozambique to contribute to global emissions reduction and thus to climate mitigation forms part of the national strategy to address climate change (Republic of Mozambique 2012) for which MICOA has overall responsibility, REDD+ has largely been pursued independently. One of MICOA's own goals is to implement the national climate change strategy to which REDD+ should contribute, but so far in developing district local action plans (LAPAs) for adaptation, REDD+ has not figured<sup>10</sup>.

Amongst bilateral donors, aside from Norway and Japan, none are directly engaged with REDD+, although they do support climate adaptation. As a result of the slow pace of REDD donors prefer to use other channels. The general perspective of donors consulted during the study was that REDD+ is relatively marginal to strategies to address climate change in Mozambique. While some other donors have assisted conservation and forestry development in Mozambique, they have not chosen to fund REDD+ activities as such, and it is not clear whether or not there is strong consensus amongst donors that sustainable forest management should be a priority issue to be addressed in order to address climate change. A Danish technical adviser to MICOA pointed out that REDD+ itself already had sufficient funding, and that the priorities should be to mainstream and build capacity for climate action across government, to support local adaptation plans, and improve local knowledge and data. USAID activities, for example, are focussed on mangrove conservation, including carbon storage assessments, mangrove restoration and sustainable use, and also on promoting agroforestry, improved farming techniques and community participation in plantation forestry areas but without seeking to introduce carbon payments.

Norway, while engaged in REDD+ globally and supporting the Testing REDD project in Mozambique, foresees practical needs to assist conservation agriculture, field efficient stoves and sustainable local businesses in the focus provinces (Manica, Sofala, and Zambezia), and aims to take a landscape approach, supporting carbon assessments, and assessing the drivers of deforestation and how they can be addressed, while building on existing initiatives. This approach, however is a local arrangement between the embassy and the collaborating partners, and not part of Norway's broader support to REDD+ globally. A NORAD official in Maputo argued that the "real issues" to focus on were those concerning area planning and that the principle innovation of REDD was simply to introduce market based carbon payments, which were not working so well.

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<sup>9</sup> Micaia is a partner on the World Bank-funded Growing Forest Partnerships (GFP) Programme, which is facilitated in Mozambique by CTV. Other agencies involved in the GFP programmes are FAO (UN Food and Agriculture Organisation), IUCN (International Union for Conservation of Nature), and IIED (International Institute for Environment and Development) (Acacia Natural Resource Consultants Ltd, 2012).

<sup>10</sup> Interview with a MICOA official dealing with REDD+ on 9 November 2013.



### 3.3 Government decree for REDD+

Government's concern about the sheer scale of applications for REDD+, and the land areas involved, led to development of a legislative and regulatory framework for licensing and management of REDD+ projects. There is a convergence between the areas identified for piloting REDD+ implementation and the interest expressed by project proponents, which can be attributed to proponents having had access in 2010 to the preliminary drafts of the REDD+ strategy, which defined broad potential areas.

In August 2013 Mozambique's Council of Ministers approved a decree setting out technical procedures for approval of REDD+ projects and establishing a REDD+ technical unit (Law 70/2013, *Boletim da República* 20 December 2013). The technical unit is located in MICOA and reports to both MICOA's National Directorates for Environmental Management (DNGA) and to DNTF in the Ministry of Agriculture, which are jointly responsible for approving projects, and are also required to coordinate with the National Administration for Conservation Areas under Ministry of Tourism. In principle, individual Mozambican citizens, national and international public and private organisations including NGOs registered in Mozambique and local communities can all apply to operate REDD+ projects. The law establishes a hierarchy of levels of approval for projects according to the land area involved, with those over 100,000 hectares subject of approval by the Council of Ministers.

The REDD+ decree does not require project proponents to have secure land rights (DUATs) to operate projects; rather, if REDD+ projects require land rights in order to operate, the provisions of the 1997 Land Law apply, in addition to the decree's requirements for licensing REDD+ projects. Proponents must obtain community consent in order to obtain a REDD+ license, and must also obtain community consent under the land law if a land concession is required for the purpose. If a project proponent or third party already holds a DUAT (a concessionary land right, granted by the state) to the area concerned, a REDD+ licence must also be obtained.

A number of actors engaged in or consulted during the REDD+ process, such as CTV, IIED, iTC, UNAC and iTC all emphasised the importance of securing rural communities' rights to resources to safeguard livelihoods and enable community adaptation to climate risks. These concerns do appear to have found their way into policy through the legal separation of REDD+ licensing and land allocation. As a result, REDD+ operators face challenges in devising effective operating schemes which do not rely on the control of the land resources involved or in obtaining community consent to obtain land concessions in addition to REDD+ licenses.

In the tradition of recent Mozambican land and natural resource legislation, (outside of the mining sector) the REDD+ decree creates clear scope for communities to benefit from REDD+ projects, stating (Article 14.) that projects cannot be approved without community consultations, and in the event of unfavourable community views resulting from consultations, licences or provisional DUATs cannot be approved, except within established conservation areas. No communities have so far proposed to do so, and the technical challenges involved would be considerable, almost certainly beyond their means, and so this is unlikely to be feasible in practice. While it may be tempting to attribute the difficulties that would be faced to the cumbersome provisions of the legislation itself, a World Bank official dealing with REDD pointed out that the restrictions are inherent in nature of REDD+ and common to other countries.

Considering Mozambique's weak practical record, however, of effective community consultations under the simple procedures required by the land law, and the limited control exerted by the state over forest resource exploitation and degradation, a number of concerns

can be identified with the detail of the law for the distribution of benefits, and the integration of climate compatible development into REDD+:

- Project proposal requirements, including organization of consultations, presentation of minutes, conduct of EIAs, payment of fees and project assessment and evaluation procedures, in addition to the carbon measurement and reporting requirements of international carbon funds are all likely to deter applications from all but very well organised and well-resourced private or public organisations or international NGOs, with which local civil society organisations, communities and individuals would have to engage in order to influence project designs and to access REDD+ finance.
- The need for coordination and shared administrative interpretation of the regulations by MICOA, MINAG and MITUR which are all required to set guidelines to ensure implementation of the law. The same ministries are also expected to set the terms under which local communities can access 20% of tax revenues accruing from REDD+ projects, but at present no unified system is in place, and as with the Land and Forest and Wildlife legislation, no guidelines are provided on how local communities are to be represented and organised for the purpose.
- Centralisation of approvals for very large projects, creating scope for top-down imposition of large projects with support at high levels of government without full consideration at the lower levels, as has occurred with the land law. On the other hand, a multi-stakeholder technical committee could in principle mobilise the expertise to guard against arbitrary or ill-considered project approvals that might occur at central or lower political levels. NGO and research institution members of this committee are to be designated by central government ministries, however.
- The decree states that conversion of natural forests to plantations and all activities licensed under forest or other legislation (such as logging and charcoal burning) but not under the REDD+ regulations cannot be considered eligible for REDD+ finance. However the law fails completely to address forest conversion and degradation that occurs outside the REDD+ framework and in different locations. A central problem of the REDD+ decree is that it does not tackle the deficiencies of the existing legislative regime and arrangements for supervision and control of forest resource use and management, which have failed to control illegal logging and deforestation.

Benefit sharing remains one of the most challenging issues if REDD+ is to be conducive to CCD, which requires careful definition of the rights of different parties to land, forest resources and carbon, and improvement of existing mechanisms for distribution and use of rural communities' shares of forest and wildlife tax revenues. In addition the scope for the state to cancel DUAT titles and REDD+ operating licences allocated to REDD+ and forest industry operators is critical in order to create conditions for local communities and small-scale farmers to derive benefits from REDD (Sitoe *et al.* 2012).

It has been proposed that responsibilities and competences at all levels for the governance arrangements for REDD+ should be clarified, and that community or public consultations about REDD+ projects should be transformed into inclusive processes for decision making on natural resources use, and that by integrating planning for REDD+ at the district level in the annual District Economic and Social Plan and Budget in order to encourage peasants to take part (Sitoe *et al.* 2012). Although desirable, it is difficult to see how this alone could be effective without more systematic efforts to enable districts to undertake land use planning and land administration, for which there is at present only very limited capacity. CTV have stressed the importance of capacity building of local government, local stakeholder platforms and community natural resource management committees and the private sector in moving towards more participatory environmental governance.

### **3.4 The Envirotrade Sofala Carbon Project**

The previous sections have illustrated large scale proposals for REDD+ in Mozambique amidst tensions between centralization and decentralization. At the same time, the principle carbon forestry pilot in Mozambique has been a community based project run by Envirotrade, originally a UK company and now based in South Africa, which adopted an approach that appears to offer some potential for CCD. The project has received considerable attention – both positive and negative – and has been seen as a significant precursor to REDD+ implementation.

Envirotrade's operations, now consolidated into the Sofala Carbon Project, have not so far utilised REDD+ finance, but were developed under CDM principles to facilitate carbon offsetting by carbon emitters through sales of carbon credits on the Voluntary Carbon Market, utilising a community-based approach. As such it has provided a test-bed for carbon forestry, and generated a range of lessons for future REDD+ projects. The project has operated since 2005, initially in a buffer zone adjoining Gorongosa National Park, subsequently expanding to an extensive area of Miombo woodland in Cheringoma District in the Zambezi valley. The costs were met by private investors interested in the longer term potential of the carbon market and by a grant from the EU.

Instead of a conventional plantation forestry approach, Envirotrade sought to promote carbon sequestration by engaging local communities in the carbon market to reduce pressure on tracts of natural forest in central Mozambique through combining community based protection of natural forests with promotion of sustainable small-scale forest industries and income generating agroforestry techniques involving direct payments to farmers for tree planting. Envirotrade did not seek to establish exclusive land rights, but instead to operate on community land, creating tradable carbon credits from which a 30% share of proceeds is returned to participating communities through a combination of direct payments to farmers for planting agroforestry species, and investments in community infrastructure. A sustainable forest management plan in a 35,000 hectare area within the buffer zones of Gorongosa National Parks involves support to small scale sustainable forest industries and revenue sharing throughout the community to reduce pressure on natural forest from shifting agriculture, charcoal burning and timber extraction.

Participating farmers in N'hambita reported positive outcomes for themselves and for the local community from the combination of Carbon earnings and the income generating projects established by Envirotrade (Africa Forum 2008). For the project's expansion into the Zambezi valley, ITC secured community land rights and established community NR management committees. Independent verification of carbon credits sold to clients is provided annually, against Plan Vivo carbon forestry technical standards for accumulation of carbon through agroforestry and improved management of natural forest, engagement with local communities and distribution of benefits.

By combining carbon payments to farmers derived from international investment and trade in carbon credits with efforts to prevent natural forest degradation, promote conservation farming and develop sustainable small scale forest industries, the project appears to offer considerable potential for CCD through integrating mitigation efforts with pro-poor and climate-resilient development. In practice however, the weakness of the voluntary carbon market has deterred investors and constrained expansion of Envirotrade's approach, potentially undermining the effectiveness of mitigation and leaving participating communities reliant on external expertise and grant assistance in order to gain real benefits.

## 4 Competition and conflict: actors' alignments on carbon forestry and REDD+

From the review above, it is clear that while REDD+ is deemed attractive by a range of stakeholders, it is also facing considerable challenges in reconciling land, forest governance and development goals. In this section, we trace the key dividing lines in the debate, the associated actors and their power relations. The principal divisions of opinion reflect divergent perspectives concerning firstly the overall direction, responsibilities for leadership and management of the REDD+ process in Mozambique, which is discussed below in Section 4.1, and secondly, tensions between the idea of REDD+ as an economic and revenue generation opportunity, and the risks and opportunities it poses for rural communities in the areas targeted for REDD+ projects, discussed in Section 4.2.

### 4.1 Tensions in the REDD+ process

One of the difficulties encountered by Mozambique in developing its strategy on REDD+ has been the lack of clear institutional responsibilities for leadership, and a consequent uncertainty about what REDD+ projects should involve in practice. Two separate government institutions have been involved: MICOA, the Ministry for Environmental Coordination, with the mandate for cross-sector coordination in the fields of environment and climate change; and DNTF, the National Directorate for Lands and Forests, part of the Ministry of Agriculture (MINAG), responsible for forest management and likely to be centrally involved in supervising implementation of REDD+ projects and the monitoring of forest cover and forest carbon stocks. Both DNTF and MICOA are regarded as relatively weak institutions amongst international agencies.

In practice, MICOA's lead roles in international climate negotiations and management of climate funds in Mozambique, and its over-riding mandate for cross-sector coordination, have given it the role of lead national agency for REDD+ and for management of forest carbon funds in. MICOA regards REDD+ as primarily an opportunity for Mozambique to contribute to climate change mitigation through emissions reduction and forest carbon sequestration, a process which should lead to considerable revenue generation as a result of carbon payments through the voluntary carbon markets or from disbursement of global forest carbon funds. DNTF however still remains the lead technical agency, and both organisations are involved in the REDD+ Technical Unit, which is housed within MICOA, a situation which various informants described as the result of a considerable power struggle between MICOA and DNTF. MICOA's lack of technical expertise in forest management and carbon monitoring will require strong collaboration with the DNTF and with MINAG more broadly in order to address the drivers of deforestation and forest degradation in Mozambique. In practice both agencies will have a role in scrutinising and approving REDD+ projects as defined in the legislation, although it is unclear how they will work together.

Another important institutional player addressing climate change in Mozambique is INGC, the national institute for disaster management, which has played a very active role in promoting climate change adaptation as a means of disaster prevention, both on the ground and through technical analysis and planning, but has so far had no practical role to play in relation to REDD+. INGC has sought to play a stronger role in adaptation planning, and the World Bank had backed it to play a stronger role in REDD+, as MICOA's own performance in coordination is relatively weak in practice. Nonetheless, the Council of Ministers determined that MICOA should retain the coordinating role, rather than Ministry of State Administration (MAE), the parent Ministry of INGC. Some observers however, such as WWF, also see a role for DNPDR, the National Directorate for Rural Development Planning, which has now

been incorporated into MAE in getting REDD+ off the ground at local level and assisting local government to play a role.

MICOA itself favours large-scale REDD+ projects “because of the nature and extent of forest resources and the need for large scale conservation efforts to save them”<sup>11</sup>. Some observers in government however attribute this approach by MICOA to a preoccupation with raising revenues, treating REDD+ as “just a big project” to assist in carbon sequestration and in resourcing the responsible ministry, noting that so far no provisions have been made for REDD+ activities to contribute to climate adaptation<sup>12</sup>. Although the operations of loggers and the use of forest revenues need to be better controlled in order to ensure sustainable management and reforestation, and MICOA officials recognise this, there are no mechanisms for doing so in the framework established so far for licensing REDD+ projects.

The National Directorate of Land and Forests (DNTF), in the Ministry of Agriculture, sees REDD+ primarily as an opportunity to improve forest management, a perspective which also leaves little space for dialogue on how REDD+ responds to multiple goals including climate adaptation, and how it can help achieve co-benefits. DNTF’s stated preference to implement REDD+ has been to adjust forest legislation to improve forest conservation and management and to strengthen its own capacity for forest resource assessment, monitoring and enforcement, rather than allocating forest carbon funds and supervising large- scale projects. DNTF has so far received no funds from the World Bank assisted REDD+ preparation process but has been assisted by JICA to conduct carbon and resource assessments, establish a national platform for forest information, and build capacity to strengthen forest management. This has enabled DNTF to play a more active role in international climate negotiations, in particular those concerning Land Use, Land Use Change and Forestry (LULUCF).

During the present study DNTF officials argued that promulgation of REDD+ legislation should not have been the priority and is not sufficient to address the problem of deforestation which cannot be solved “simply by throwing money at it”. DNTF considers that the arrangements set up for selecting and managing large scale REDD+ projects are unlikely to curtail continued forest degradation, and argues instead that forest legislation itself should be revised to meet the requirements of REDD+, as this determines what type of forest utilisation activities can and cannot take place on the ground, and that the FCPF should assist Mozambique as a country meet its own core responsibilities of forest management, conservation, inventory and supervision<sup>13</sup>.

DNTF officials pointed out that timber exporters, notably the Chinese, who now prefer to purchase timber from licensed private loggers rather than operate concessions, are able to dictate timber prices. In practice the 20% of government timber revenue shares which legislation stipulates as due to local communities amounts to very little for two principle reasons: firstly low prices and widespread under-declaration of timber volumes by loggers and timber exporters; and secondly, the revenue sharing system itself is leaky and often fails to channel forest revenues into activities that generate sustainable community benefits. The challenge is therefore to create sufficient incentives for communities and forest industries to conserve forest resources in the long term and adjust livelihoods accordingly, to reduce pressure on forest resources from agriculture and other activities<sup>14</sup>. Although carbon payments can provide incentives for tree planting, harvesting after several years without replanting will not contribute to the objectives of carbon sequestration. DNTF accepts the need for conservation of very large areas, so as to generate sufficient revenues to make

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<sup>11</sup> Discussions with MICOA officials dealing with REDD+, November 2014.

<sup>12</sup> Discussions with MICOA officials dealing with REDD+, November 2014.

<sup>13</sup> Discussion with a senior forestry DNTF official and a JICA technical adviser to DNTF on 24 February 2014.

<sup>14</sup> Interview with an outgoing senior forestry official in DNTF, 5 November 2013.

projects viable, while pointing out that much of the interest from the private sector in large scale carbon forestry is primarily speculative.

There are perceptions amongst forestry officials that the REDD+ process in Mozambique has been unduly influenced by the private sector and by international financial institutions, notably the World Bank, and that this has led the country into a difficult position with REDD+, preoccupied with the development of large scale projects which as presently conceived “cannot easily be implemented and would likely to lead to conflict”. Forestry officials have also pointed out that government had little real idea about what REDD+ activities should involve in practice. DNTF staff also expressed disappointment that Norwegian funding was being channelled through an independent initiative for testing REDD rather than through central government, and concern that the private sector and NGOs may have too much influence over the types of projects that would be proposed to local government and rural communities<sup>15</sup>.

Effective control of forest degradation would however require a thorough overhaul of the existing forest management regime and legislation, and investment in supervisory capacity, for which DNTF presently has only limited financial and technical support from the Ministry. Although forestry officials argue that the Ministry of Agriculture (MINAG) should have a key role in changing forest management practice through regulation and changing behaviour of forest users and forest dependent communities, as it is MINAG that deals with these stakeholders on the ground, they also admitted that at the top level, the Agriculture Ministry has had only a limited focus on climate change and sustainable natural resource management issues<sup>16</sup>. Moreover, there appears to be limited political will to change the presently weak supervision, which outside observers familiar with Mozambique associate directly with vested interests within the Ministry and elsewhere in government, such as rent-seeking from continued illegal logging, weak forest management and timber exports.

Nevertheless DNTF staff expressed cautious optimism that the government would be prepared to devote additional budget resources to the forest sector and that this might in due course facilitate greater access to FCPF and other international funding for improved forest management. Even without such support, DNTF would proceed more slowly in its efforts to strengthen forest management. A national Agro-ecological zoning process was due for completion in early 2014 and was expected to provide useful instruments for REDD+ planning at the provincial level – although conducted at 1:250,000 scale, too large for detailed local planning, it should be able to set broad parameters within which district government can and identify more detailed specific land use options to help implement REDD+ in consultation with local stakeholders.

The perception that Mozambique has taken an approach to REDD+ focused on large scale carbon forestry and forest conservation driven by the private sector and by international finance institutions agencies is shared by various observers in civil society and government. The rapid pace with which large, private REDD+ related proposals and requests for land allocation developed, and the subsequent concern to put a REDD+ legal framework in place to regulate and manage such projects has contributed to this perception. World Bank officials acknowledge that the speed with which the REDD process and the enthusiasm for large scale projects developed has contributed to the disconnect between REDD+ and the broader climate change agenda, and to continuing uncertainty about what REDD+ activities to link forest protection to carbon payments should actually involve, a situation that the Bank has found to be quite common amongst developing countries seeking to take up REDD+.

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<sup>15</sup> Discussion with a senior forestry DNTF official and a JICA technical adviser to DNTF on 24 February 2014.

<sup>16</sup> A further complication pointed out by staff from MICOA is that some large scale agriculture projects promoted by the Ministry of Agriculture may threaten indigenous forest resources and community interests in maintaining these: as a result MICOA needs to become involved in the socio-environmental assessment of these projects, as MINAG itself has no mechanisms for assessment of agriculture projects on natural resources and natural resource users.

Although a more strategic approach might possibly have been able to establish REDD more clearly as an instrument for promoting the green economy and sustainable development, the Bank defends the REDD+ decree as necessary to create a structured process for participation and decision making. At the same time, a Bank official stressed that “REDD+ is not going to happen through projects alone”, and that it should contribute to both climate change mitigation and adaptation by combining work to improve forest management, “climate smart” agriculture and sustainable energy. From this point of view, broader acceptance and participation by government agencies and civil society would be welcome<sup>17</sup>.

Limited consultation by government about REDD+, however, also appears to have contributed to a general picture of REDD+ as centralised and driven by international, private, government concerns to disburse climate funds and promote profit, revenue generation through large scale carbon forestry projects. Despite the engagement alongside government of a progressive coalition of actors in the REDD+ process and proposals to pilot it, other actors in civil society, notably JA! (*Justiça Ambiental*), WWF and UNAC, have criticised the lack of transparency and real public engagement in the process, which they perceived to be largely driven by the World Bank. Some observers were also concerned about the role of private forestry companies, such as the Portuguese company Portucel which had recently received an IFC loan for construction of a paper mill in Manica province. WWF noted that consultation only began after the draft REDD-readiness proposal was produced, and that without much greater awareness of the implications of REDD+ and engagement by NGOs, it would be unlikely to achieve its objectives of sustainable forest management and significantly increased carbon sequestration. JA!, however, remained categorically unwilling to engage with REDD+ processes (a position which a UN official felt weakened the process as a whole) and expressed the view that the World Bank’s engagement with certain environmental NGOs such as CTV in the REDD-readiness process had undermined a pre-existing national NGO network and coalition *Amigos da Floresta*, concerned with forest protection.

#### **4.2 REDD+ as development opportunity, or threat to rural communities?**

The views adopted and the criticisms made by stakeholders inside and outside government in relation to the unfolding of the REDD+ process so far also reflect their perceptions of what REDD+ is intended to achieve and positions on whether or not and how to engage with it. Amongst the stakeholders in Mozambique, three broad narratives concerning about REDD+ and carbon forestry are discernible, more or less aligned with those that are articulated in international debates and literature on the topic:

- i) that REDD+ offers Mozambique significant growth and revenue earning opportunities linked to conservation and carbon forestry, also enabling Mozambique to play a part in mitigating climate change;
- ii) that REDD+ is linked directly to international, private and governmental interests in the commercialisation of nature and control of Mozambique’s natural resources, representing a considerable threat to forest dependent rural communities, already vulnerable to land grabs, who are likely to be excluded from REDD schemes; and
- iii) that REDD can potentially be effective in addressing climate change mitigation and helping local communities to adapt only under certain conditions which enable them and other stakeholders to participate fully.

In the international literature, White *et al.* (2012) identify market environmentalism as one of the trends that promote accumulation through land acquisition. Market environmentalism, exemplified by market-based payments for carbon sequestration and other environment services is one example, adds new dynamics of commodification of the environment (see Castree 2008a, 2008b) to reduced resource access in the name of the environment

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<sup>17</sup> Discussions with a World Bank staff member dealing with REDD+ in Mozambique, 6 March 2014.

(Fairhead *et al.* 2012), resulting in further processes of accumulation driven by the pricing of previously non-marketable goods. Opinion in international debate has become substantially polarised around market or non-market financing of REDD, and whether or not the commercialisation of carbon storage in natural ecosystems, and the associated private control of land resources and changes to land use and land access are good or bad things<sup>18</sup>. In Mozambique, this polarisation is reflected in a clustering of various national stakeholders around the first two principle narratives that viewing REDD+ as a major opportunity, or as a major threat.

In broad terms, a number of governmental, international and other actors, notably those in the private sector, share the view that REDD+ is a significant development opportunity for Mozambique. Carbon forestry and REDD is a source of funding that Mozambique needs to protect its forest resources, which are currently under threat from multiple factors, as expressed by various informants during this study. This argument reflects the idea that climate finance can be a catalyst for economic growth and development.<sup>19</sup> Expressions of the view include, “We depend on forest resources, [and] REDD is one instrument we have to use to help achieve this”.<sup>20</sup> And “We think that there will be opportunities [from REDD+] in the future, if not now”.<sup>21</sup>

Promoters of this position in Mozambique argue that carbon finance is not only profitable but also good for the climate and for local development. An implication of this view is that big areas are needed for carbon forestry initiatives to be economically viable, by guaranteeing carbon credits at scale and avoiding leakage. Small-scale carbon sequestration projects would not give returns to the investors, while forest degrading activities, such as charcoal making could simply move to neighbouring areas, cancelling the carbon savings. Directly aligned with this narrative is the corporate-led model of large-scale forest carbon projects adopted by forestry and carbon trading companies in Mozambique, in which they would be prepared to make extensive investments in forest protection and accumulation to generate credits for sale in an expanded REDD+ -related or compliance-based carbon markets.

There are however a number of important nuances to this narrative, as expressed by actors in Mozambique. First and foremost, although central government clearly identifies REDD+ as an opportunity, as discussed in the previous section, the main government actors differ in that MICOA views it as an opportunity to tap into global public and private funds to generate revenue from carbon sequestration, whereas DNTF views REDD+ as an opportunity to strengthen forest management. The Japanese International Cooperation Agency (JICA) and the Norwegian Agency for Development Cooperation (NORAD) as the principal donors assisting Mozambique with REDD+ also differ in their engagement, and are aligned with MICOA and DNTF respectively. All of them appear to share a common uncertainty about how to design REDD+ interventions so as to realise the opportunities and to ensure that forest carbon funds can flow to Mozambique in practice. Some, in particular, are supporting the national REDD+ process.

Private sector actors, not surprisingly, have viewed REDD+ primarily in terms of business opportunities, as reflected in the earlier rush to develop large-scale projects. However private sector understanding appears to have evolved and diversified as the process has moved forward; in particular, some do now highlight the need for community involvement and participation.<sup>22</sup> Private sector actors are also reluctant, however, to invest significant time

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<sup>18</sup> See e.g. the debate at <http://www.redd-monitor.org/2012/11/23/should-redd-be-financed-by-forest-carbon-markets/>

<sup>19</sup> See e.g. <http://pubs.iied.org/pdfs/17169IIED.pdf>

<sup>20</sup> MICOA official interviewed on 6 Nov 2013

<sup>21</sup> Director of a Mozambican carbon trading company interviewed on 8 November 2013

<sup>22</sup> Representative of an international forestry investor in Mozambique, 1 Nov 2013; Director of a Mozambican carbon trading company, 6 Nov 2013



and resources in preparing REDD+ projects, given the complex processes involved, uncertainties and the lack of a well-functioning voluntary carbon market.<sup>23</sup> The funding difficulties surrounding Envirotrade's activities are a case in point, as the company recently had to scale back operations due to the weakness of the voluntary carbon market combined with the non-renewal of EU funding. Moreover, following emergence of the REDD+ legislation, private sector actors were dismayed at the restrictive conditions required for approval of REDD+ projects, and particularly the severe tax regime imposed on REDD+ operators, especially in view of the declining carbon market. At a workshop held in Maputo in February 2014, private sector representatives noted it was much easier to gain operating licences and profits from activities that promote deforestation such as logging, charcoal production and forest clearance for other land uses than it would be for REDD+, and that major REDD+ projects were unlikely to be forthcoming in the near future for lack of incentives.

A number of international conservation agencies involved in promoting large scale REDD+ projects appear to have adopted the narrative of REDD+ as a major opportunity, but appear to have modified this as a result of slow progress in practice and the lack of a clear and transparent model for how REDD+ carbon funding would operate in practice in Mozambique. Although no national civil society organisations have adopted a position of uncritical support for large scale REDD+ projects, there are some stark contrasts in views articulated amongst environmental NGOs, for whom REDD+ has proven very divisive.

As mentioned in Section 3.2 a grouping of national and international agencies are involved in the REDD+ testing and consultations, including CTV and ORAM, both of which are leading national advocacy NGOs in the environment, land and natural resources sectors. On the other hand, the second, "REDD rejectionist" narrative is explicitly adopted by other NGOs: there are anti-REDD campaigns, well known internationally and also active in Mozambique. Internationally, Friends of the Earth International (FoEI) and La Via Campesina are the main promoters of this narrative; in Mozambique they collaborate directly with *Justiça Ambiental* (JA!, Environmental Justice)<sup>24</sup>, a member of FoEI, and the national secretariat of *União Nacional de Camponeses* (UNAC, National Peasants Union) a member of La Via Campesina.

This narrative directly associates REDD+ with carbon trading, which is perceived as a zero sum game that reduces forest-based livelihoods to dependency on private carbon trading companies and is likely to jeopardize food security. JA! asserted that REDD+ as conceived in Mozambique fails to address the real problems of deforestation and that government does not really understand what is involved in tackling the drivers<sup>25</sup>. REDD+ is regarded as an approach that is likely to provide financial incentives to replace complex forest ecosystems with monoculture plantations, using pesticides and creating problems with the water supply. The implication of this narrative is that communities dependent on forests for their survival must be in control of complex forest ecosystems if their food security is to be maintained. Actors promoting this narrative advocate for a drastic reduction of emissions from non-renewable energy sources used in industrialised countries. There are also calls for alternatives to REDD+, which is associated with carbon finance and perceived as a complicated mechanism where rights to forests could be given away with the signing of contracts that have not been properly understood.

Both JA! and UNAC made early criticisms of the REDD+ national strategy process, centred on its apparent focus on market mechanisms, the lack of involvement of civil society in the early debates and the concerns that monoculture projects that could be eligible for REDD+

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<sup>23</sup> Representative of an international forestry investor in Mozambique, 1 Nov 2013

<sup>24</sup> *Justiça Ambiental*, 8<sup>th</sup> November 2013

<sup>25</sup> Discussions held with *Justiça Ambiental* staff members on 14 and 15 November 2013

finance would displace peasant farmers (Via Campesina Africa 2012). Via Campesina Africa (2012) also considered that community and farmers' consultations in July 2011, which included only 889 individuals (Sitoe *et al.* 2012), were unrepresentative for a country with more than 20 million people. JA! has denounced the lack of transparent information about and lack of access to the REDD+ process for those interested in following it, complaining that information provided by government and its partners in the REDD+ Working Group meetings was concerned only with opportunities for REDD+ for Mozambique, rather than the risks and potential problems (Via Campesina Africa 2012).

#### **4.3 A converging agenda around triple wins?**

Although the study found stakeholder opinion to be considerably polarised, with potential external and internal investors favouring large scale land acquisitions, and some civil society groups and farmers organisations favouring development of family based ecological farming methods while dismissing REDD+ as entirely irrelevant, a third and broader grouping including international and local civil society players, adopts the more nuanced and open REDD+ narrative, that represents a more evidence-based perspective and a centre ground between more polarised views on REDD+.

This view is that while REDD+ presents challenges, it can work if the "right" conditions are in place in Mozambique, and that it should be tested and adjusted as the programme gets underway. This view highlights the benefits of PES when they are combined with other development activities. The underlying idea is that local farmers earning higher incomes from carbon funds than from traditional slash and burn agriculture will reduce deforestation. Nevertheless, the relevance of community based management approaches is also highlighted, and it is argued that large-scale projects can have unpredictable consequences. This grouping of "conditional supporters" of REDD+ includes a number of national and international NGOs including CTV, IIED, Flora and Fauna International (FFI), World Wide Fund for Nature (WWF), other partners in the "Testing REDD" programme, ITC, as well as some donors such as AFD, the French Development Agency, as well as some in the private sector. Moreover, MICOA and MINAG themselves also appear to be increasingly inclined towards this perspective. It overlaps with the two opposing narratives described above, but identifies a potential for large- and small scale projects. The breadth of this grouping and convergence of perspectives observed in focus group discussions and the project workshop suggests scope for the emergence of progressive coalitions of actors willing to collaborate with one another across different sectors, and with district government and community organisations to achieve results.

Arguably, much of the NGO opposition and broader scepticism towards REDD+ originates in the structure and dynamics of the process, and the perception that the REDD+ debate is all but 'settled' between government actors, private sector and donors. Actors clustering around the third narrative challenged this view, however, arguing that there is still a lot of scope for discussion and influence over the national process, noting that REDD+ is not closed, and still remains up for grabs. While it has become clear that REDD should not be about granting private concessions to forest areas which people are not allowed to touch, many are unclear about what it is in practice. The narrative recommends points of principle, such as respect for land rights, and the need to address the drivers of deforestation by limiting uncontrolled exploitation, and to promote conservation agriculture sustainable natural resource based businesses, reduced energy demand and community and stakeholder engagement at the local level. However it stops short of articulating mechanisms or project approaches whereby these objectives can be realised.

In discussions held during this study, private sector companies were surprisingly positive about proposals put forward by civil society actors for REDD+ projects that engage directly with communities, respect tenure and access rights in forest areas, promoting a mix of

sustainable agricultural intensification sustainable NR utilization and community forestry, all of which were seen as supportive of community and ecosystem resilience and adaptation to climate risk. There was general enthusiasm about the idea of partnership programmes to manage REDD+ across multiple land parcels and land areas held by rural communities, individual farmers, producer associations, conservation agencies and forestry companies, which reduce requirements for REDD+ proponents to obtain land rights and the risks of associated land conflict<sup>26</sup>.

The routes to establishment of REDD+ programmes of this type remains far from clear, however, despite stakeholder willingness, as they require considerable improvements in capacity for land use mapping and decentralised land administration and a territorial planning or landscape scale, in addition to mechanisms for channelling carbon finance and measurement and verification of carbon stocks across variegated landscape mosaics. Despite these challenges, a majority of stakeholders at the study workshop in Maputo, February 2014, remained willing to collaborate within the overall REDD+ framework, because of their longer term interests in its potential, although a minority of civil society actors continue to dismiss REDD+ as wholly unworkable.

Stakeholders' principle grievances were with government, particularly central government due to the unresponsiveness of bureaucracy to private sector and civil society concerns, the slow pace of decision making, for instance about land allocation and conflicts, the political emphasis on revenue generation, rent-seeking by government officials and difficulties in getting government institutions to work together across different sectors and levels. The proponents of a more inclusive approach to REDD+ recognise the need to establish strong leadership in government and for clarity of mandates and good coordination amongst the different agencies involved in order to overcome institutional weaknesses, rivalries and move on from the political struggles for leadership that have occurred<sup>27</sup>.

It is worth noting that amongst those who acknowledge that REDD+ may eventually provide some real opportunities to link climate mitigation and development, some remained agnostic about this, noting that REDD+ debates in practice have become largely disconnected from other parts of the climate change and development debates in Mozambique, and particularly from efforts at adaptation. Actors working on climate adaptation knew little about REDD+, whereas many of those working on REDD+ had difficulties explaining what adaptation is. A wide variety of governmental and both national and international NGO bodies consulted stressed the importance promoting adoption of agricultural techniques and technologies resilient to moisture and temperature stress, the role of sustainable agricultural intensification and alternative income sources in reducing pressure on forest resources, and the need to reduce dependency of an estimated 95% of Mozambique's population on fuelwood and charcoal as sources of energy by scaling up the use of improved stoves and renewable energy sources<sup>28</sup>. In contrast, discussion of the content of REDD+ activities and links to broader national climate action have been largely absent from the official REDD+ policy and strategy processes.

While the view that REDD+ presents a real opportunity to address climate change is an important one, there is also a sense that the opportunity has not been taken and that enthusiasm has faded, to the extent it has almost become nearly a 'non-issue' for those not directly involved in developing REDD+. One reason for this was that since REDD+ funding was not yet available, various actors were starting to lose faith; another reason was that in

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<sup>26</sup> Findings of the stakeholder workshop held in Maputo, 24 February 2014

<sup>27</sup> Views expressed at a focus group of forest sector stakeholders in Chimoio, November 2013.

<sup>28</sup> Organisations which took this point of view included the National Energy Fund (FUNAE), National Agricultural Research Institute (IIAM), SNV, IIED, UNAC and the NGO LIVANINGO)

Mozambique's overall climate change strategy, the key focus was on adaptation, not REDD+ or mitigation.

At the REDD+ stakeholder workshop held in Maputo in February 2014, a participatory institutional mapping exercise undertaken led to identification of actors to sensitise and engage in discussion on the practical challenges and difficulties of REDD+ implementation. These actors fell into two principle groups: those in central and provincial government and a wider variety of actors at district and local level, including environmental NGOs, the local private sector, community-based and farmers' organisations, local government authorities and customary leaders. A systematic process of consultation with the latter group was recommended to engage them in discussions about how REDD+ should work on the ground. However for this to occur, high level political recognition of the need to re-examine and develop the REDD+ strategy in a participatory way would be needed, engaging the National Council for Sustainable Development to take discussions to the Council of Ministers. A continuing role for ITC, the community lands initiative, or similar brokerage agencies able to act as intermediaries between rural communities and government, private sector and civil society partners was also regarded as essential to put in place projects that provided real incentives for communities while also meeting broader stakeholder needs.

## 5 Consequences

In this section we discuss the actual and potential consequences of carbon forestry and REDD+ activities for climate compatible development in Mozambique and for different social groups, with a focus on poor rural communities and small scale farmers. In Section 5.1, we set out a framework in which the potential effects that different models for implementation of REDD+ activities could have on different aspects of CCD can be assessed, considering what type of approaches could directly engage the rural poor. Section 5.2 reviews the lessons from the Sofala Carbon Project for potential community-based approaches to REDD+, and goes on to consider what levels and forms of community engagement and what combinations of natural and planted forest activities could make effective trade-offs in contributing to CCD. Section 5.3 reflects on the broader governance implications of a socially inclusive and climate compatible approach to REDD+.

### 5.1 Typology of REDD+ and their implications

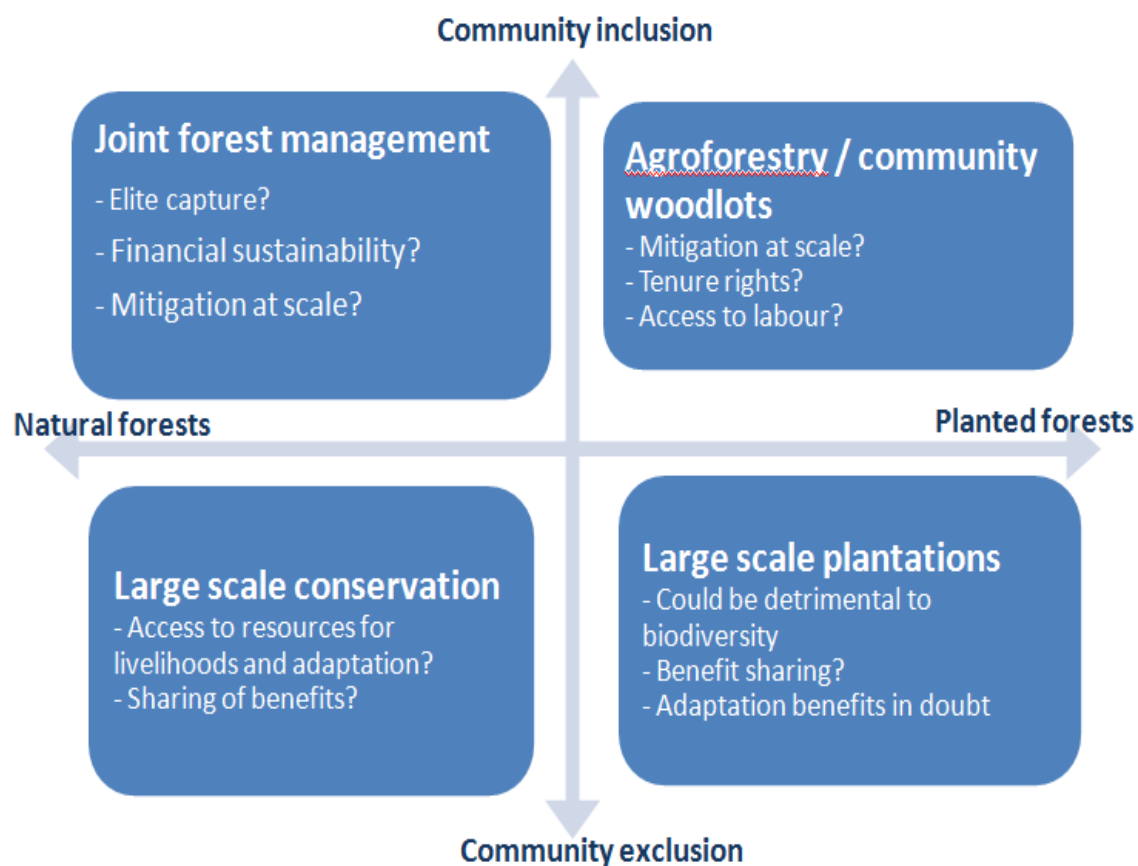
As a visual aid to considering the climate compatible development implications of different types of carbon forestry and forest conservation initiatives, potential REDD+ project scenarios can be located within a continuum defined by two axes, as shown in Figure 2: combinations of natural and planted forests (on the x axis) and levels of community inclusion or exclusion (on the y axis). Different project approaches can be represented by varying locations on the graph which have specific implications; a) in relation to climate compatibility of local economic development and landscape scale NR management involved; and b) for distribution of development benefits and the land and resource access and tenure management implications.

Scenarios located largely in the upper quadrants involve greater security of tenure for participating farmers and communities and are therefore likely to gain greater community collaboration. In principle a mix of scenarios is possible within a REDD+ programme within which acceptable trade-offs between mitigation, adaptation and development objectives can be made so as to ensure an acceptable balance.

While REDD+ has challenging implications for land governance, more effective land governance could shape the implementation of REDD+ to assist in achieving CCD by

enabling new economic opportunities and adaptive capabilities for Mozambique's rural poor, in addition to assisting in climate mitigation and the related potential public and private development gains.

**Figure 2. Carbon forest typology and implications for climate compatible development**



Source: authors' own.

The arguments of national stakeholders, including those involved in the “Testing REDD programme”, however, are that agricultural intensification by family farmers, combined with CBNRM approaches involving income generation based on sustainable techniques for agroforestry, ecotourism and harvesting of forest produce on land owned and managed by local people in conjunction with public and private investors has long term potential to generate benefits for poor farmers while also increasing carbon storage. This view is supported by literature suggesting that REDD+ could sustain a wider set of environmental services (watershed regulation local climatic regulation, biodiversity), and thereby build increased resilience to climate change and variability (e.g. McFarland, 2012). Such methods could therefore be built into the design of REDD+ and into ongoing reforestation and forest conservation efforts, but longer term investments would also need to be made in gradual development of community capacity for sustainable income generation and natural resource management.

There is considerable scope for smallholder and community engagement in commercial forestry activities for farmer and community interest in establishing small-scale woodlots, which, with good management, could both increase carbon stocks and generate local incomes, particularly on degraded lands. Despite a nationwide presidential “community forests” initiative concurrent with the REDD+ preparation process, by 2012-13 no institutional arrangements had been put in place to enable farmers and community groups to access

planting material, technical assistance or markets for tree products, or to foster links with private sector led forestry development. In practice, a multiple dispersed woodlot model increases transaction costs for forest investors: while there are prospects for forestry companies to promote out-grower schemes at the margins, they are unlikely to be major players in developing community- based forestry for carbon storage or other purposes

Organised protection of remaining large tracts of forest land, favoured by conservation agencies, has significant potential to reduce carbon emissions, but risks exclusion of expanding local populations from potential agricultural land. Benefit sharing arrangements established under Forest & Wildlife legislation enable communities to gain access to proceeds of forest exploitation, but community institutions for resource and revenue management are so far only weakly developed, leading to misappropriation and poor utilisation of funds.

## **5.2 The Sofala Carbon Project and the scope for community-based REDD+**

Envirotrade's Sofala Carbon Project, summarised earlier in Section 3.4 is the only practical example of a carbon forestry project in Mozambique that has sought to engage local communities in a carbon forestry project that could meet the criteria for climate compatible development by combining climate change mitigation with development and strengthening of the adaptive capacity of communities and farmers. The fundamentals of this approach are that Envirotrade did not establish exclusive land rights in the project area, but instead adopted a partnership approach on community controlled land, while financing and selling carbon credits for profit, approximately one third of which was to be returned to participating communities, with another third supporting project management costs and the remaining third providing returns to investors. At the same time, Envirotrade assists the implementation of national policies restricting occupation and utilisation of conservation areas and buffer zones of national parks from which communities are already excluded by law. The approach involved a combination of direct payments to farmers for planting of useful agroforestry species financed by the project based on anticipated sales of carbon credits and development of small scale sustainable forest industries and revenue sharing throughout the community to reduce pressure on natural forest from shifting agriculture charcoal burning and uncontrolled timber extraction.

While the project appears (on paper) to represent "triple win" outcomes, for the local community, the carbon trading company, and the environment, offering a potential way forward for climate compatible development, it has also attracted considerable criticism. Some of this has been motivated in part by opposition to carbon trading as a means to reduce greenhouse gas emissions reflecting positions adopted by critics of VCM mechanisms for climate change mitigation, rather than rigorous analysis of the project's outcomes and impacts on the ground. Nonetheless a number of criticisms and concerns identified (FERN 2012) appear to reflect genuine problems which are supported by other research evidence and would affect REDD+ projects adopting a similar approach:

- Agroforestry species planted by local farmers through small scale projects make limited contributions to carbon accumulation, but the project has faced difficulties in carbon measurement and accounting, especially for avoided loss of natural forest areas which provides the greatest carbon benefits. An EC review (AGRECO 2010) found despite good performance in the agroforestry component, overall management and socio economic impact, including establishment of community micro enterprises and benefit sharing, progress with forest inventory and biomass estimates, forest management and monitoring, and carbon baselines avoided deforestation was insufficient. The Maputo EU

office noted that the project had been “very problematic” and payment had to be suspended several times<sup>29</sup>.

- The project relied on EU grant funding to establish income generating activities, develop a plan for participatory NR management and pay forest guards, the very components that helped reconcile community interests with carbon storage at scale. The EU does not prioritise forestry activities in Mozambique and does not plan continued support to the project. An EU official noted that although the practical activities the project supported were positive, it was not implemented in accordance with international rules for carbon measurement and monitoring, basing payments on figures extrapolated from elsewhere, and thus would not qualify as a REDD+ pilot project.
- There was uneven distribution of benefits and risks of benefit capture by farmers with larger land areas and those engaged in small scale forest industries, with limited mechanisms to spread benefits more broadly. Jindal *et al.* (2012) found that despite wide participation from the poorest households, the effect on incomes is small. Although the project itself generated some new local market opportunities, notably for provision of seedlings for tree planting, and also for provision of other goods and services to those farmers and families receiving carbon payments, there is no evidence that these activities benefited the whole community, and their sustainability is dependent on continuity of the project itself.
- The most telling criticism is perhaps that the project was unable to provide sustainable mechanisms for carbon storage, as a result of making up-front payments for an initial seven year period farmers for their shares of the full expected value of 100 years carbon accumulation over in order to raise incomes. After carbon payments end there is little incentive to conserve or to re-plant trees, except those that can yield non-timber commercial crops or other benefits. Jindal *et al.* (2012) similarly identify non-permanence as a major concern for the N’hambita community carbon project. Income generating activities reliant on the local market created by the carbon payments themselves would also prove unsustainable.
- The weakness of the VCM has deterred investors and constrained expansion of Envirotrade’s approach. Although by 2010 a total of 1,949 farmers participated in the agroforestry contracts across the two project sites, the global recession had begun to constrain carbon offset markets, compounding inherent buyer resistance to ex-ante Carbon offsets (Goodman 2010). By the end of 2013 the value of carbon credits had fallen to around 4-5 dollars per tonne of CO<sub>2</sub>, from around 10 - 12 dollars when the project began<sup>30</sup>.

The Envirotrade project manager concluded that protection and management of natural forest and woodlands offers the most effective way of carbon storage and that the ideal mix of activities would be 20% tree planting and 80% forest management. It could thus be expected that REDD+ activities could therefore need to adopt a similar mix, for which REDD+ would need to guarantee community engagement in sustainable management activities at greater scale and ensure a sustainable and equitable system for channelling resources to community level and individual households that reflect the volumes of carbon savings achieved. However the decline of the carbon market and the business model established create a dual challenge of sustainability, which relies on both carbon payments and on income generation activities and community development support provided by Envirotrade to reduce pressure on forest resources and create real benefits for local people.

With reference to the typology of the various types of carbon forestry projects and their implications for climate change mitigation and adaptation shown in Figure 2, various different project approaches that combine REDD+ and development objectives, including the Sofala

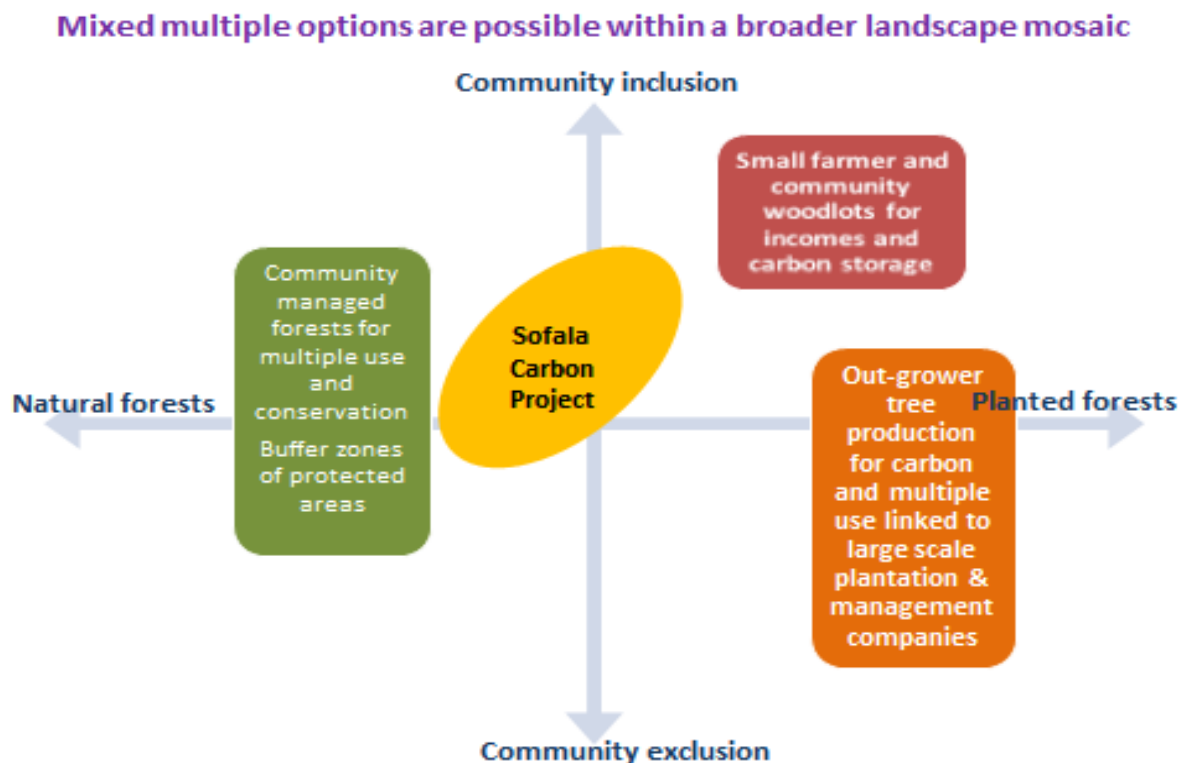
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<sup>29</sup> Meeting with senior EU official, November 2013.

<sup>30</sup> Discussion with Sofala Carbon Project Manager at a focus group in Chimoio, November 2013

Carbon Project's approach, can be located at different points on the graph, as illustrated in Figure 3, below.

**Figure 3. Mixed multiple options for carbon forestry combining forest conservation, tree planting with community livelihood diversification activities.**



Source: authors' own.

Certain types of projects can in principle make sustainable trade-offs amongst multiple objectives and stakeholder interests. Envirotrade's approach shows promise as a 'win-win' option, which respects communities' rights while presenting them with real alternatives to unsustainable land and NR use. If reliant on the voluntary carbon market, this has limited scope to expand because of the low carbon price and flagging investor interest, but with access to global public carbon finance through REDD+ or if statutory requirements for offsetting carbon emissions were to be introduced, it could potentially do so.

For different REDD+ activities to generate carbon saving and improve forest conservation at scale however, they would need to be inserted in broader, sustainable forest landscape mosaics, for which there are two principle challenges. First, the land and forest utilization rights of communities reliant on forest resources would need to be recognized and defined spatially in relation to those of REDD+ operators and other forest users, through community land delimitation and associated regularization and consultation processes. Second, REDD+ operators would need to introduce methods to mobilise participation, manage activities in agreement with different stakeholders, verify changes to carbon stocks and distribute benefit shares across multiple land units. While these might include some substantial conservation and plantation units, in surrounding areas multiple activities would be needed to prevent encroachment, generate real economic benefit and enable climate adaptation for communities and farmers. As the Sofala Carbon Project case shows, implementation of an inclusive and integrated approach to REDD+ in Mozambique will require appropriate



management and technical expertise and considerable public subsidy, to complement the limited resources that the private market can deliver.

### 5.3 Governance implications

These findings also imply that more systematic efforts to secure community land rights will be needed to ensure social inclusion in REDD+, and that forms of capital investment linked to operating alliances involving the private sector, rural communities, development agencies, and local government should be encouraged as a foundation for CCD in the longer term. REDD+ will therefore require improvements in rural governance.

Strengthening governance does not simply involve clarifying the roles and mandates and improving the technical performance of the specialist government environmental, forestry and land sector institutions involved, necessary as this may be, but involving different sectors of government and multiple players in local, district, provincial, regional and national territorial contexts and levels so as to strengthen the public stewardship of rural development processes and forest resources. Given increasing development pressures on land and natural resources, including those generated by REDD+, we suggest that three key concepts are relevant should be operationalised in strategies to achieve climate compatible development:

- *Sustainable landscape mosaics*: comprising integrated, compatible land and natural resource uses, including both resource conservation and sustainable production and encompassing market networks linking urban and more and less densely populated rural areas.
- *Territorial governance*: meaning the institutional arrangements to engage stakeholders in the management of local and regional development dynamics to reconcile and make trade-offs amongst multiple interest in land allocation and land use planning processes.
- *Adaptive land use / land rights management*: to enable adaptation of rural areas to climate change, and to the demands made on them for food production, human occupation and environmental services, including management of transitions to more sustainable and intensive agricultural production by small farmers, guarantees of secure tenure within minimal areas and protection of land and natural resources held in common such as community forests and grazing areas.

## 6 Conclusions

This study has found that the implementation of REDD+ in Mozambique has challenging implications. REDD+ has some potential to meet CCD objectives, but there is very little in the way of practical initiatives in the forest sector in Mozambique which are achieving some degree of CCD benefits. A range of large scale REDD+ project proposals have emerged, which aim to generate private and public revenue through tree planting and forest conservation; amongst these projects those that are more conservation oriented might also assist in biophysical adaptation to climate change by strengthening ecosystem resilience. Although this would appear to address CCD objectives, a political economy perspective implies that trade-offs in the distribution of benefits of carbon forestry between different groups should also be considered, if the integration of climate management and economic development objectives through REDD+ is also to deliver results for the rural poor.

The Sofala carbon project, which can be seen as the most ambitious (and promising) in aiming to achieve CCD objectives, sought to integrate sustainable rural livelihoods and secure land rights for participating communities with production of carbon credits for trading on the VCM has faced difficulties because of the weakness of the carbon market and came

to rely on additional public funding, while also unable to meet fully the stringent carbon verification requirements of REDD+. Large scale REDD+ projects would face similar difficulties, and if they are not simply to exclude farmers and forest users, also face the challenge of managing forest conservation and carbon accumulation at scale across a landscape comprising multiple land units.

In order to enable acceptable trade-offs amongst objectives and the interests of different stakeholder groups while safeguarding the poor, improvements in the governance of land, forests and rural investment will be needed, including more secure land rights, more effective consultation procedures and transparent mechanisms for the private sector and conservation agencies to engage and contract with rural communities. Together with more systematic understanding and mapping of stakeholder interests and land use options, and stronger voice for village communities in the planning process, innovations such as these could shape the prospects for socially inclusive implementation of REDD+ and help rural areas and regional economies in Mozambique to establish sustainable development trajectories compatible with climate risk while also contributing to climate mitigation and delivering development gains.

The study has also shown that despite some polarisation between supporters and critics of REDD+, and the lack of alignment of key government players around common approaches and objectives, there exists in Mozambique a potential coalition of players including both international agencies and civil society players interested in pursuing a socially inclusive approach to REDD+ which includes poverty reduction and climate adaptation, rather than just simply using market mechanisms to promote forest conservation and tree planting. Moreover, actors in the private sector and some in government appear increasingly open to collaborate to develop such an approach. It can be expected that institutional weaknesses and vested interests in centralisation and rent-seeking within government will continue to pose obstacles to the institutional change and development needed to underpin more climate compatible and inclusive approaches to REDD+. Sustained and critical experimentation, and sustained engagement with government at different levels by a progressive coalition of actors in testing, evaluation and scaling-up of effective practical approaches will therefore be needed, alongside ongoing and longer term efforts to improve land and forest governance and build greater capacity for effective and inclusive planning by district and provincial government.

Based on the study findings, we make a number of practical recommendations to link improved land governance with climate compatible development in Mozambique:

1. Conduct strategic revision / updating of Land, Forest & Wildlife and REDD+ legislation. This should include recognition of community-based land and natural resource management committees as key actors in land administration and resource management at local level.
2. Develop a stronger framework for decentralised implementation of land use and territorial planning, REDD+, cadastral and management capacity, including stakeholder participation in district level planning and the role of regional and local economic development agencies.
3. Harmonise mechanisms for sharing of revenues and benefits derived from forest and NR utilisation, tourism, plantation forestry, REDD+ and land taxes, and introduce clear, unified procedures for local government, rural communities and private sector and civil society operators and partners in REDD+ and related sustainable development programmes to access the funds.
4. Analyse development dynamics, trends and drivers including configurations of stakeholder interest and scope for development of actor coalitions that promote win-win territorial development outcomes combining growth with poverty reduction and climate

resilience with reference to Mozambique's major development corridors, river basins and important landscape assemblages.

5. Adopt partnership-based approaches to implementation of REDD+ programs. Conventional forestry companies, wildlife and safari tourism operators, and global conservation agencies operating alone on a project basis are unlikely to fit the bill. Government, donor and private sector partnership platforms for development corridors point towards a way forward but remain top down, and overly focused on economic growth-related objectives with limited scope civil society and opportunities for community participation, lacking strategies and structures for strengthening territorial governance and climate compatibility.

To conclude, we reflect briefly on the results and utility of the political economy approach adopted by this study. Political economy analysis has been applied a) to characterise the range of opinion in Mozambique, clustered around a number of principle narratives about carbon forestry, b) to gain a somewhat deeper understanding of the interests and inter-relationships of the different actors in government, private sector and civil society and of the emerging institutional framework for management of REDD+, and c) to situate debates about REDD+ in the dynamic contexts of access to and control of land and natural resources in Mozambique, as well as that of global debate about REDD+.

The principle limitation has been that REDD+ itself has not yet "gone live" in Mozambique, no significant REDD+ projects are yet up and running and therefore characterisation of its political economy is inevitably somewhat speculative, as are the standpoints adopted by various actors. It would therefore be premature to suggest that mechanisms for approving REDD+ projects and for allocation of financial or land resources for carbon forestry had been captured by particular interest groups. The political economy approach adopted could therefore be extended to conduct more region-specific analysis of current practices, institutional performance and competing stakeholder interests in the control and utilisation of forest resources and in land amongst the different local, national and global actors, and to gain a deeper understanding of practical lessons from elsewhere, in support of practical the efforts to pilot and test practical approaches to REDD projects in Mozambique.

To better understand the backdrop to REDD+ of institutional fragility, political disagreements, limited capacity and resources for more decentralised planning and high levels of distrust of the state amongst communities, the private sector and civil society it would also be illuminating to analyse in greater depth the recent historical and contemporary political and economic context in Mozambique as a whole. This would include the country's faltering emergence from civil war, its rapid economic growth, continuing dependence on aid and foreign direct investment, the role of private interests within a centralised state, and, not least, the growing significance of mineral and fossil fuel resource development, which could lead Mozambique in the relatively near future become a net carbon emitter, increasing the pressures to increase carbon sequestration and establish a climate-compatible development pathway.

Nonetheless, given the tensions and differences of opinion amongst various stakeholder groups, including the government bodies responsible, the high degree of centralisation in planning and debate, the general weaknesses of the carbon market and the absence so far of REDD+ project designs with promise to control deforestation in practice, engage communities and professional REDD+ operators across multiple land units, the study has identified concerns about the realism of implementing REDD+ at scale in Mozambique, if resources are not invested in the practical development of decentralised institutional capacity and in participatory stakeholder frameworks for climate-compatible development planning at regional, provincial and district levels.

Through active engagement with the players the investigation found that there is indeed a basis for building greater stakeholder consensus and collaboration linked to learning from practical experience. Thus, while more in-depth understanding of the dynamics of competing interests in the forest sector, and the political and institutional contexts for rural development would be helpful, a practical, participatory approach should be maintained in order to promote incorporation of development and climate adaptation objectives into REDD+, and foster harmonisation of stakeholder objectives including the livelihood objectives of small-scale producers and rural communities so that the future financing of REDD+ projects can help set Mozambique on a more climate-compatible development pathway.

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